

Listing and Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 1. (currently amended) A power supply circuit arrangement switchable between
2 modes, comprising:

3 a main circuit and an auxiliary circuit, each coupled to derive their power supply
4 voltage/current from a common power supply;

5 a control circuit having detector means for detecting the level of a signal and
6 providing a control action responsive to the detected level of the signal, and

7 variable-impedance means coupled between the common power supply and the
8 auxiliary circuit and responsive to the control ~~circuit~~ action for switching between a first
9 and a second impedance states, producing respective first and second power supply
10 voltages/currents being received by the auxiliary circuit from the power supply; wherein

11 the first and second voltages/currents corresponding to operating and non-zero
12 reduced power modes respectively, and the variable-impedance means is not coupled
13 between the common power supply and the main circuit.

1 2. (original) The arrangement of claim 1 wherein for the first impedance state the
2 corresponding power supply voltage supplied to the auxiliary circuit permits normal
3 operation and, for the second impedance state the corresponding power supply voltage
4 supplied to the auxiliary circuit is inadequate for its normal operation, whereas the
5 power supply voltages/currents supplied to the main circuit is adequate for its normal
6 operation in both the first and second impedance states.

1 3. (original) An arrangement of claim 1, wherein the variable-impedance means
2 comprises a switch and an impedance.

1 4. (original) The arrangement of claim 3 wherein the switch and impedance are
2 connected in parallel with each other with the switch being operable in response to the
3 control circuit.

1 5. (original) The arrangement of claim 4 wherein second impedance state is
2 produced by opening the switch and said first impedance state is produced by closing
3 the switch.

1 6. (original) An arrangement as defined in claim 5, wherein the switch comprises
2 a relay having switch contacts connected in parallel with said impedance.

1 7. (original) An arrangement as defined in claim 3, wherein the impedance
2 comprises a resistance.

1 8. (original) An arrangement as defined in claim 3, wherein the impedance
2 comprises a combination of resistive and reactive components.

1 9. (currently amended) A power supply circuit arrangement, ~~switchable between~~
2 ~~operational and non-zero reduced power modes~~ comprising:

3 an output for providing a first operating voltage to a first circuit;

4 a control circuit having detector means for detecting the level of a signal and
5 providing a control action responsive to the detected level of the signal; and

6 variable-impedance means coupled ~~in series with a power supply circuit~~ between
7 the output and a second circuit ~~powered from the power supply circuit~~, and switchable
8 between higher and lower impedance states by the control action; wherein

9 in the lower impedance state, a power supply voltage/~~current~~ provided to the

10 second circuit is a ~~first~~ second operating voltage/~~current~~ of the second circuit, which is

11 no greater than the first operating voltage, and in the higher impedance state, the
12 power supply voltage/~~current~~ provided to the second circuit is a third operating voltage,
13 which is less than the first second operating voltage.

1 10. (original) The arrangement of claim 9, wherein the variable-impedance
2 comprises a switch connected in parallel with an impedance, and the control circuit
3 action operates the switch to select said first and second impedance states, by opening
4 and closing the switch contacts.

1 11. (currently amended) ~~An~~ The arrangement as defined in claim 10, wherein the
2 switch comprises the contacts of a relay.

1 12. (currently amended) The arrangement of claim 9, wherein the first and
2 second circuits are speaker drive circuits ~~A power amplifier switchable between~~
3 ~~operational and non-zero reduced power modes, powered by a power supply circuit~~
4 ~~arrangement, and having audio input means, the power supply circuit arrangement~~
5 ~~comprising:~~
6 ~~—— power input means for receiving power from a power supply,~~
7 ~~—— a speaker drive circuit coupled for receiving power from the power supply, the~~
8 ~~drive circuit being operational in a non-zero reduced power mode at a power supply~~
9 ~~voltage/current that is inadequate for operation of the speaker drive circuit in an~~
10 ~~operational mode;~~
11 ~~—— a control circuit having detector means for detecting the level of an audio signal~~
12 ~~and providing a control action responsive to the level of the audio signal;~~
13 ~~—— variable-impedance switching means coupled between the power input means~~
14 ~~and the drive circuit and switchable by the control action to switch between first and~~
15 ~~second impedance states;~~

~~the first impedance state providing a power supply voltage/current to the drive circuit which is sufficient for normal operation of the drive circuit, the second impedance state providing a power supply voltage/current to the drive circuit, which is inadequate for normal operation of the drive circuit.~~

13. (currently amended) The arrangement of claim 12, wherein the second operation voltage corresponds to a voltage required by the second circuit under a normal operation, and the third operational voltage is less than the required voltage-A
~~loudspeaker system comprising a power supply circuit arrangement and audio input means, the power supply circuit arrangement being switchable between operational and non-zero reduced power modes and comprising:~~
~~— a speaker drive circuit coupled to receive a power supply voltage/current;~~
~~— a control circuit having detector means for detecting the level of an audio signal and providing a control action dependence upon the detected level of the audio signal;~~
~~— variable impedance switching means coupled between a power supply circuit and the speaker drive circuit and responsive to the control action to switch between first and second impedance states;~~
~~— the control action selecting between a first impedance state and a second impedance state and switching the speaker drive circuit between an operational mode and a non-zero reduced power mode respectively.~~

14. (new) The arrangement of claim 12, wherein the second circuit drives a sub-woofer loudspeaker for outputting a sub-woofer signal from an audio source and the control circuit detects the level of the sub-woofer signal to provide the control action.

1 15. (new) The arrangement of claim 14, wherein if the detected level exceeds a
2 predetermined threshold, the control action causes the variable-impedance means to
3 switch to the higher impedance state.

1 16. (new) The arrangement of claim 9, wherein the second operating voltage is
2 less than the first operating voltage.

1 17. (new) The arrangement of claim 2, wherein the main and auxiliary circuits are
2 speaker drive circuits.

1 18. (new) The arrangement of claim 17, wherein the auxiliary circuit drives a sub-
2 woofer loudspeaker for outputting a sub-woofer signal from an audio source and the
3 control circuit detects the level of the sub-woofer signal to provide the control action.

1 19. (new) The arrangement of claim 18, wherein the second impedance state
2 has a higher impedance than the first impedance state.

1 20. (new) The arrangement of claim 19, wherein if the detected level exceeds a
2 predetermined threshold, the control action causes the variable-impedance means to
3 switch to the second impedance state.